



# Global Temperature Report: September 2007

## Global Lower Troposphere Temperature

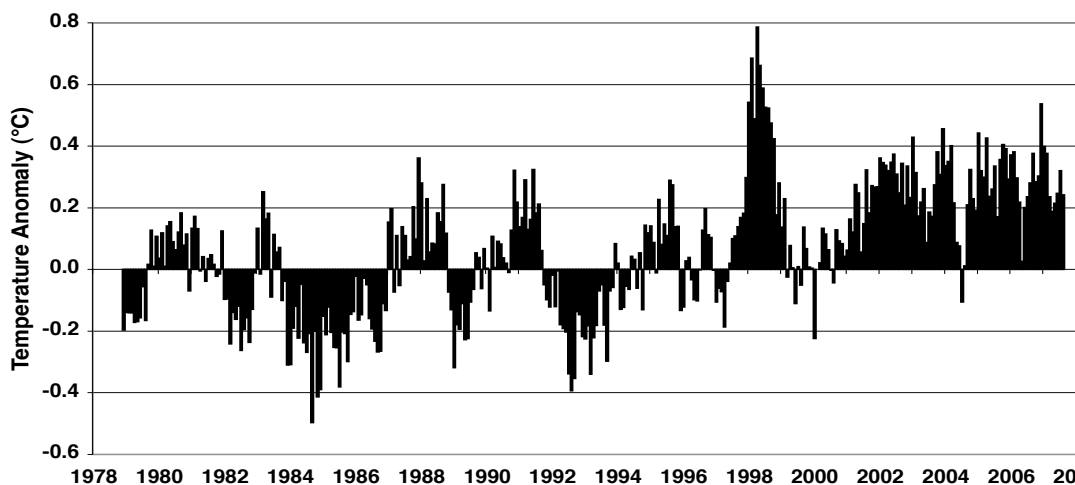


Fig. 1: Global variation from seasonal norms, in Celsius; Trend since Nov. 16, 1978: +0.14 C per decade

Global composite temp.: +0.24 C (about 0.43° Fahrenheit) above 20-year average for September.

Northern Hemisphere: +0.25 C (about 0.45° Fahrenheit) above 20-year average for September.

Southern Hemisphere: +0.23 C (about 0.41° Fahrenheit) above 20-year average for September.

August temperatures (revised): Global Composite: +0.32 C above 20-year average

Northern Hemisphere: +0.38 C above 20-year average

Southern Hemisphere: +0.27 C above 20-year average

(All temperature variations are based on a 20-year average (1979-1998) for the month reported.)

*Notes on data released Oct. 3, 2007:*

Color maps of local temperature anomalies may be available on-line at:

<http://climate.uah.edu/>

[vortex.nsstc.uah.edu/data/msu/t2lt/tltglhmmam\\_5.2](http://vortex.nsstc.uah.edu/data/msu/t2lt/tltglhmmam_5.2)

As part of an ongoing joint project between

The processed temperature data is available on- UAH and NOAA, Dr. John Christy, a professor of

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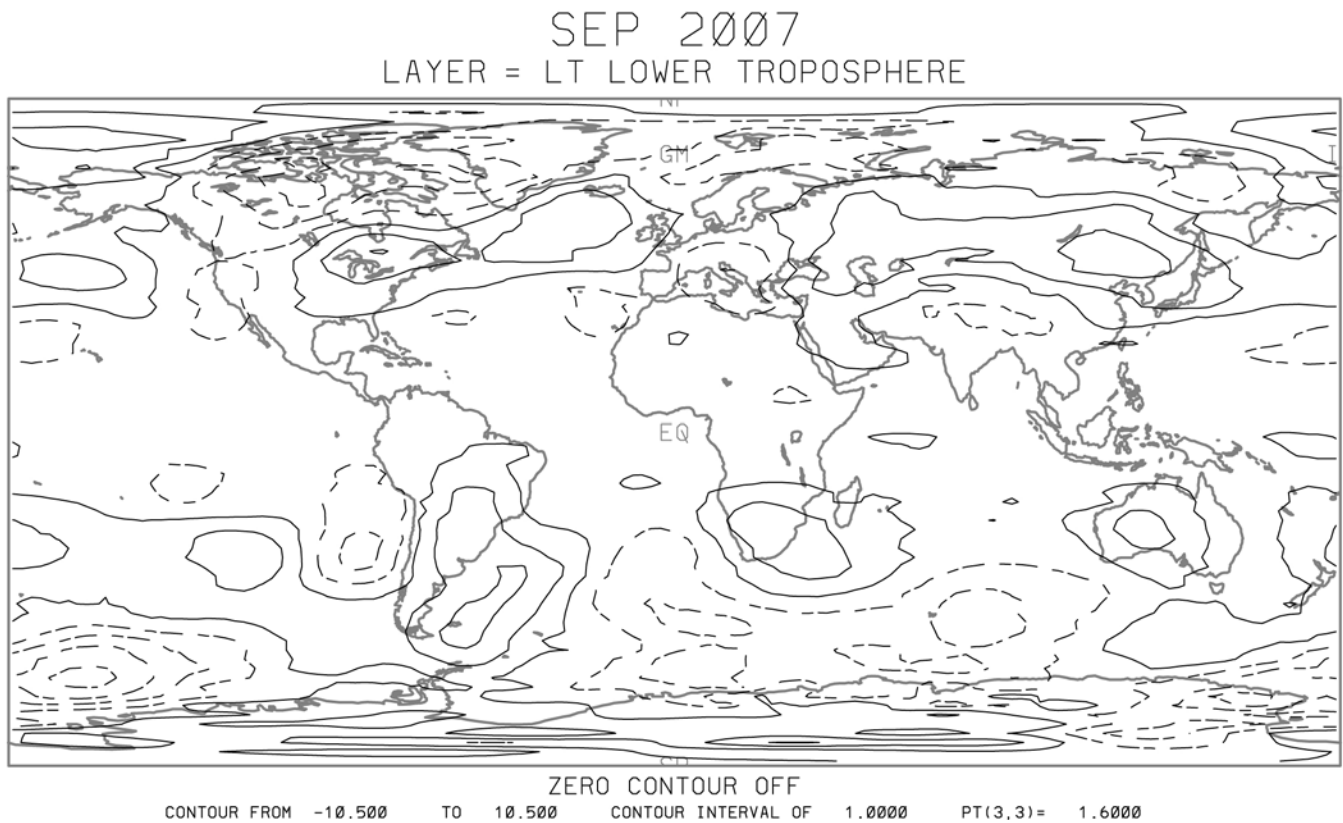
atmospheric science and director of the Earth System Science Center (ESSC) at The University of Alabama in Huntsville, and Dr. Roy Spencer, a principal research scientist in the ESSC, use data gathered by microwave sounding units on NOAA satellites to get accurate temperature readings for almost all regions of the Earth.

This includes remote desert, ocean and rain forest areas for which reliable climate data are not otherwise available. The satellite-based instruments measure the temperature of the atmosphere from the

surface up to an altitude of about eight kilometers above sea level.

Once the monthly temperature data is collected and processed, it is placed in a “public” computer file for immediate access by atmospheric scientists in the U.S. and abroad.

*Neither Spencer nor Christy receives any research support or funding from oil, coal or industrial companies or organizations, or from any private or special interest groups. All of their climate research funding comes from state and federal grants or contracts.*



Broken lines outline areas cooler than seasonal norms; solid lines outline areas warmer than seasonal norms. Each contour represents one degree Celsius, starting at -0.5 and +0.5 degrees C.